

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR .	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/605,789	10/27/2003	Thomas L. Toth	GEMS8081.193	2788
27061 75	590 02/08/2006		EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (GEMS) 14135 NORTH CEDARBURG ROAD MEQUON, WI 53097			KAO, CHIH CHENG G	
			ART UNIT	PAPER NUMBER
,			2882	
			DATE MAILED: 02/08/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Sti	
	•	
ess		7

Application No.	Applicant(s)
10/605,789	TOTH ET AL.
Examiner	Art Unit
Chih-Cheng Glen Kao	2882

**Advisory Action** Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence addre THE REPLY FILED 20 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection. b) 🔯 The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). **NOTICE OF APPEAL** 2. The Notice of Appeal was filed on \_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). Applicant's reply has overcome the following rejection(s): \_\_\_ Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. X For purposes of appeal, the proposed amendment(s): a) 🔲 will not be entered, or b) X will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: <u>1,2,5,6,8-14 and 16-23</u>. Claim(s) withdrawn from consideration: \_\_\_\_\_. AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_ 13. Other: \_\_\_\_.

EDWARD J. GLICK

Continuation of 11. does NOT place the application in condition for allowance because:

Regarding at least claims 1 and 11, Applicant's arguments are based on the declaration filed 12/14/2005. Based on the showing of good and sufficient reasons why the evidence was not earlier presented, as seen in the Applicant's remarks mailed 1/20/2006, the declaration filed 12/14/2005 is considered timely.

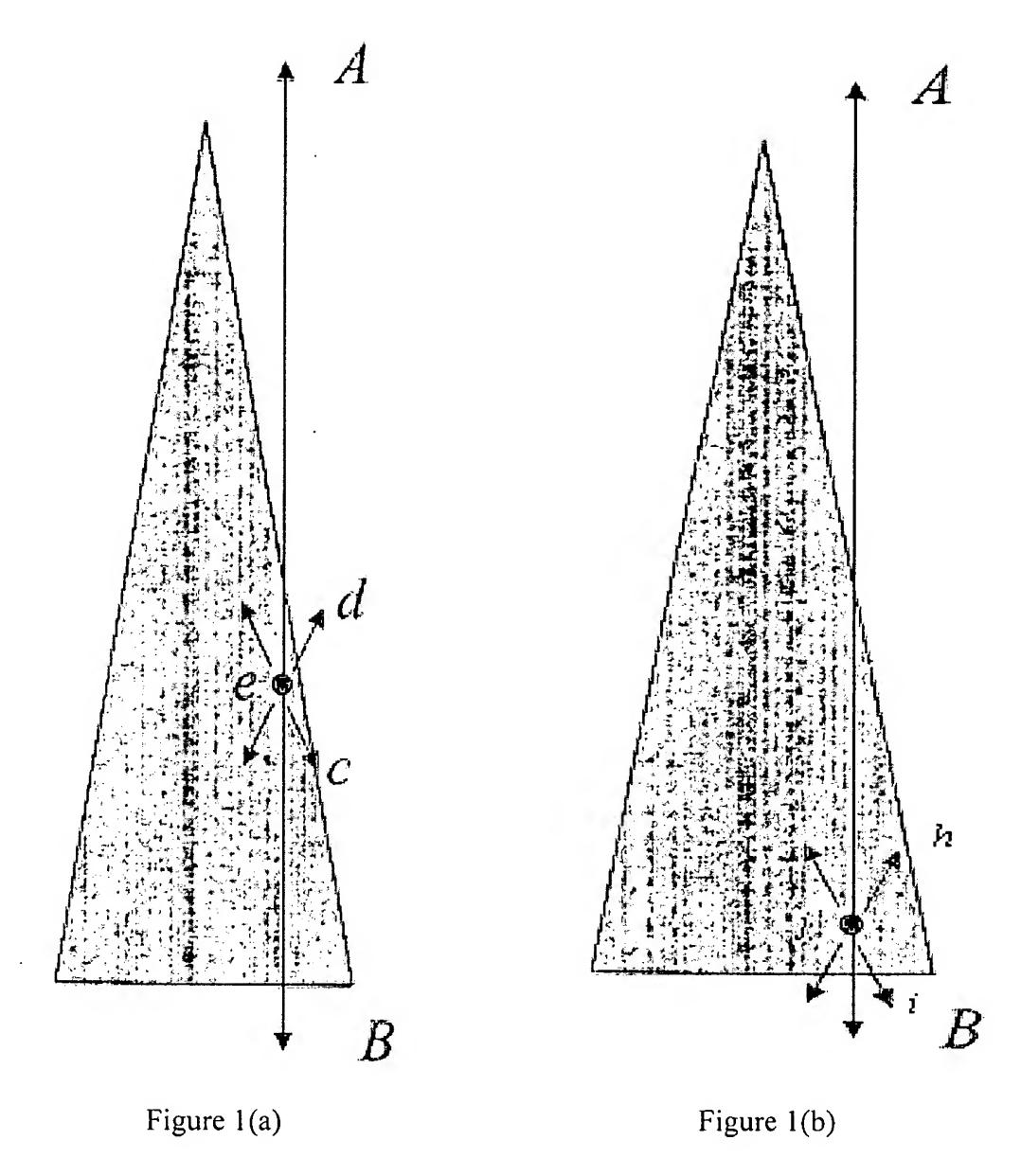
The declaration under 37 CFR 1.132 filed 12/14/2005 is insufficient to overcome the rejection of claims 1, 2, 5, 6, 8-14, and 16 based upon Moore applied under 35 U.S.C. 103 as set forth in the last Office action because of at least the following. It refer(s) only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716.

Regarding the probative value of the evidence, any secondary evidence must be related to the claimed invention. As seen in said declaration, Applicant's remarks are with regards to a detection cell with scatter collimation plates. The figures also show filters in a triangular shape with a pencil beam in a direction perpendicular to the base of the filter. However, these elements are not in the subject matter as claimed. The claims do not recite a detection cell with scatter collimation plates, triangular-shaped filters, and a pencil beam in a direction perpendicular to the base of the filter. Therefore, there is not a sufficient enough connection between the Applicant's alleged evidence of nonobviousness and the claimed invention to be of probative value.

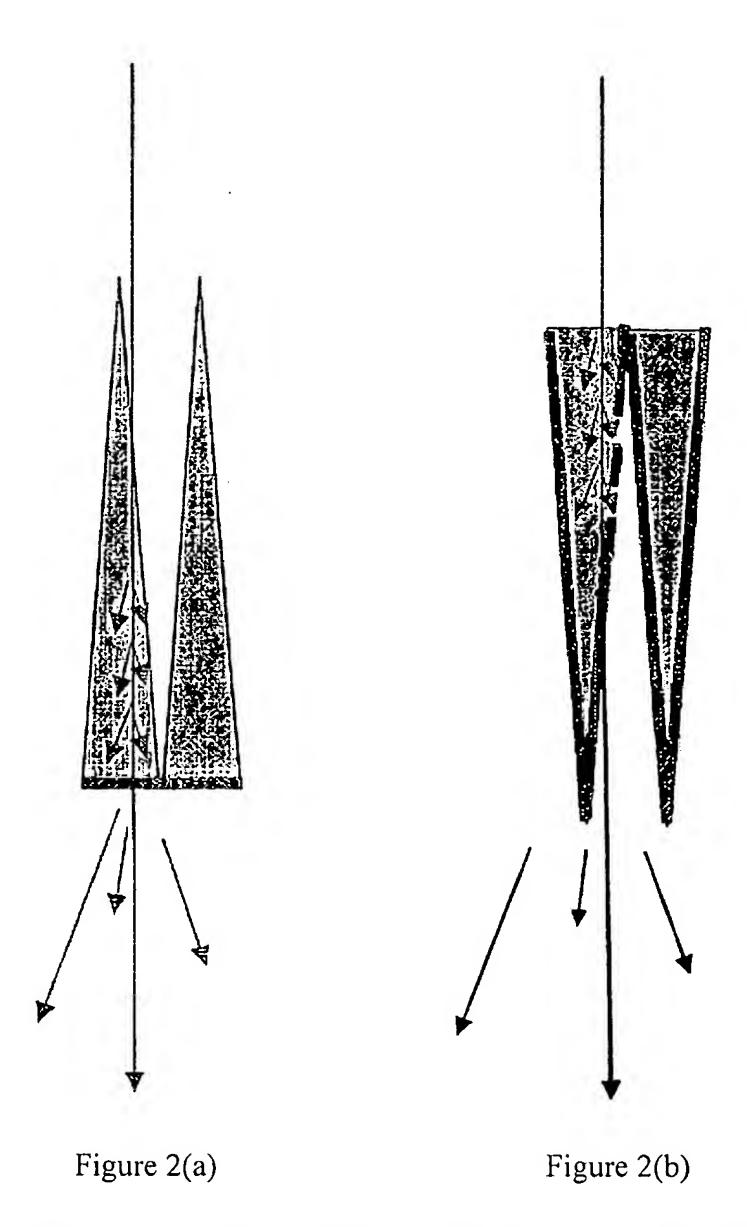
Furthermore, any objective evidence should be supported by actual proof. Since no such actual proof was provided, the declaration has been treated as opinion evidence with allegations of unexpected results. The Examiner disagrees with this opinion. As seen in Figure 1(a) below, Applicant shows that the scatter "d" toward a detector side on side "A" is greater than the scatter "c" toward a detector on side "B" since the path length for self absorption is longer for scatter "c". It appears that the Applicant is concluding that all locations will be similar in nature. However as seen in Figure 1(b) at "j", the scatter "i" toward a detector on side "B" is greater than the scatter "h" toward a detector side on side "A" since the path length for self absorption is longer for scatter "h". Therefore, the Examiner concludes that all points do not have more absorption of scattered radiation toward detector B. This is further illustrated in Figure 2, where the filter in Figure 2(b) absorbs more scattered radiation on the left side of the incident beam compared to the filter in Figure 2(a). Therefore, the Examiner concludes that Applicant has not shown that the results of flipping the filters with a body, curved portion, and tail were greater than expected results. Applicant must show that the results were greater than those which would have been expected from the prior art to an unobvious extent, and that the results were of a statistically significant advantage. Applicant has not provided any actual proof.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Regarding at least claim 17, Applicant argues that it is unnecessary to have a stationary filter with overlapping filters, thus concluding that it teaches away from the invention and is not obvious. The Examiner disagrees. Just because something is believed to be unnecessary does not necessarily mean it teaches away from the invention and is not obvious. Furthermore, Toth et al. shows that it is obvious to have a stationary filter (fig. 5, #94) with overlapping filters (fig. 5, #100 and 102). Therefore, the combination is obvious. In conclusion, Applicant's arguments are not persuasive, and the claims remain rejected.



For an X-ray interaction with matter at e, the scatter d toward a detector on side A is greater than the scatter c toward a detector on side B since the path length for self absorption is longer for scatter c. However, this is due to the location of e, not just the shape of the filter. For example, as seen at j, the scatter i toward a detector on side B is greater than the scatter h toward a detector on side A since the path length for self absorption is longer for scatter h.



In Figure 2(a), less scattered radiation is self absorbed on the left side of the incident beam since scatter path lengths in the detector direction are shorter. On the right side of the incident beam, more scattered radiation is self absorbed since path lengths in the detector direction are longer.

In Figure 2(b), scatter radiation has longer paths on the left side of the incident beam in the detector direction. Therefore, there is more self absorption and less detected scatter on the left side. On the right side of the incident beam, less scattered radiation is self absorbed since path lengths in the detector direction are shorter. Therefore, the cumulative effect of self absorption for scattered radiation in Figure 2(a) is not unexpected and statistically significant compared to Figure 2(b).